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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,162	03/31/2004	Jeong-hoon Kang	Q79803	4463

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EXAMINER	
DWIVEDI, VIKANSHA S	

ART UNIT	PAPER NUMBER
3746	

MAIL DATE	DELIVERY MODE
07/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/813,162	KANG ET AL.	
	Examiner	Art Unit	
	Vikansha S. Dwivedi	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 7, 9, 13 and 14 rejected under 35 U.S.C. 102(b) as being anticipated by Park et al. 5,993,178.

Park et al. discloses a linear compressor (Linear compressor seen in figure 1 and 3) comprising: a cylinder block forming a compressing chamber (Figure 1 and 3); a piston (32) reciprocatably provided in the compressing chamber (Figure 3); a reciprocating member connected to the piston to reciprocate with the piston as a single body (Figure 1, 6); a driver driving the reciprocating member to reciprocate (Figure 1, 3 and 3'); and a resonance spring (4, 28) comprising a first connecting part formed with a plurality of first connecting holes to permit connection to the cylinder block (Figure 4), a second connecting part that is provided inside of the first connecting part and formed with a second connecting hole to permit connection to the reciprocating member to reciprocate with the reciprocating member as a single body (Figure 4), and a plurality of arms spaced apart from one another between the first connecting part and the second connecting part (Figure 4), each of the arms comprising a first end connected to the first connecting part to be positioned between the plurality of first connecting holes (Figure 4), a second end connected to the second connecting part to be positioned in the

vicinity of the second connecting part (Figure 4), and a plurality of arm bodies of a spiral shape to connect the first end and the second end (Figure 4); wherein a width of the first connecting part is in a range of approximately one half a width of the arm body and three times the width of the arm body (Figure 4); wherein the distance between the first connecting part and each of the arm bodies is in a range of approximately one half the width of the arm body and three times the width of the arm body (Figure 4); wherein the width of the first connecting part is increased from the first end of the arm along a direction of the arm body (Figure 4); wherein the number of the arms is identical with the number of the first connecting holes (Figure 4); wherein the resonance spring is of a disk shape (Figure 4); wherein the driver comprises an outer core connected to the cylinder block, an inner core provided inside of the outer core and spaced apart from the outer core and a magnet provided between the outer core and the inner core to reciprocate by a magnetic field generated between the outer core and the inner core, and the magnet reciprocates with the reciprocating member as a single body and the outer core is connected with the first connecting hole of the first connecting part (Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6, 8, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. in view of Penswick et al. 5,920,133.

Park et al. discloses a linear compressor and the other details as claimed. Park does not disclose a wherein a first groove is inwardly formed on an outer circumference of the first connecting part in a vicinity of the first end of each of the arms; wherein the arms and the first connecting holes are provided three in number at equal intervals, respectively. Park does disclose a second groove is outwardly formed on an inner circumference of the first connecting part in a vicinity of the first end (Figure 4, right next to the arm and the I connecting hole); wherein the arms and the first connecting holes are provided three in number at equal intervals, respectively (Figure 4); wherein the number of the arms is identical with the number of the first connecting holes (4 arms and 4 holes). Penswick discloses a groove inwardly formed on an outer circumference of the first connecting part in a vicinity of the first end of each of the arms (Figure 8); wherein the arms and the first connecting holes are provided three in number at equal intervals, respectively (Figure 8). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the linear compressor as disclosed by Park et al. to have a groove inwardly formed on an outer circumference and arms and to have the arms and first connecting holes three in number to provide a simple system with low cost assembly (Background of Invention paragraph 9).

Response to Arguments

Applicant's arguments filed 5/8/2007 have been fully considered but they are not persuasive. Park clearly shows in figure 4, a width of the first connecting part is in ***a range of approximately*** one half a width of the arm body and three times the width of the arm body.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikansha S. Dwivedi whose telephone number is 571-272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vikansha

VSD

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